### § 236.0

- 236.907 Product Safety Plan (PSP).
- 236.909 Minimum performance standard.
- 236.911 Exclusions.
- 236.913 Filing and approval of PSPs.
- 236.915 Implementation and operation.
- 236.917 Retention of records.
- 236.919 Operations and Maintenance Manual.
- 236.921 Training and qualification program, general.
- 236.923 Task analysis and basic requirements.
- 236.925 Training specific to control office personnel.
- 236.927 Training specific to locomotive engineers and other operating personnel.
- 236.929 Training specific to roadway work-

### Subpart I—Positive Train Control Systems

- 236.1001 Purpose and scope.
- 236.1003 Definitions.
- 236.1005 Requirements for Positive Train Control systems.
- 236.1006 Equipping locomotives operating in PTC territory.
- 236.1007 Additional requirements for highspeed service.
- 236.1009 Procedural requirements.
- 236.1011 PTC Implementation Plan content requirements.
- 236.1013 PTC Development Plan and Notice of Product Intent content requirements and Type Approval.
- 236.1015 PTC Safety Plan content requirements and PTC System Certification.
- 236.1017 Independent third party Verification and Validation.
- 236.1019 Main line track exceptions.
- 236.1020 Exclusion of track segments for implementation due to cessation of PIH materials service or rerouting.
- 236.1021 Discontinuances, material modifications, and amendments.
- 236.1023 Errors and malfunctions.
- $236.1025 \quad [Reserved]$
- 236.1027 PTC system exclusions.
- 236.1029 PTC system use and en route failures.
- 236.1031 Previously approved PTC systems.
- 236.1033 Communications and security requirements.
- 236.1035 Field testing requirements.
- 236.1037 Records retention.
- 236.1039 Operations and Maintenance Manual.
- 236.1041 Training and qualification program, general.
- $236.\overline{1043}$  Task analysis and basic requirements.
- 236.1045 Training specific to office control personnel.
- 236.1047 Training specific to locomotive engineers and other operating personnel.
- 236.1049 Training specific to roadway workers.

- APPENDIX A TO PART 236—CIVIL PENALTIES
  APPENDIX B TO PART 236—APPENDIX B TO
  PART 236—RISK ASSESSMENT CRITERIA
- APPENDIX C TO PART 236—SAFETY ASSURANCE CRITERIA AND PROCESSES
- APPENDIX D TO PART 236—INDEPENDENT RE-VIEW OF VERIFICATION AND VALIDATION
- APPENDIX E TO PART 236—HUMAN-MACHINE INTERFACE (HMI) DESIGN
- APPENDIX F TO PART 236—MINIMUM REQUIRE-MENTS OF FRA DIRECTED INDEPENDENT THIRD-PARTY ASSESSMENT OF PTC SYS-TEM SAFETY VERIFICATION AND VALIDA-TION

AUTHORITY: 49 U.S.C. 20102-20103, 20107, 20133, 20141, 20157, 20301-20303, 20306, 20501-20505, 20701-20703, 21301-21302, 21304; 28 U.S.C. 2461, note: and 49 CFR 1.49.

EFFECTIVE DATE NOTE: At 75 FR 59117, Sept. 27, 2010, the authority citation for part 236 was revised, effective November 26, 2010. For the convenience of the user, the revised text is set forth as follows:

AUTHORITY: 49 U.S.C. 20102–20103, 20107, 20133, 20141, 20157, 20301–20303, 20306, 20501–20505, 20701–20703, 21301–21302, 21304; 28 U.S.C. 2461, note; and 49 CFR 1.49.

SOURCE: 33 FR 19684, Dec. 25, 1968, unless otherwise noted.

# § 236.0 Applicability, minimum requirements, and penalties.

- (a) Except as provided in paragraph (b) of this section, this part applies to all railroads and any person as defined in paragraph (f) of this section.
  - (b) This part does not apply to—
- (1) A railroad that operates only on track inside an installation that is not part of the general railroad system of transportation; or
- (2) Rapid transit operations in an urban area that are not connected to the general railroad system of transportation.
- (c)(1) Prior to January 17, 2012, where a passenger train is operated at a speed of 60 or more miles per hour, or a freight train is operated at a speed of 50 or more miles per hour—
- (i) A block signal system complying with the provisions of this part shall be installed; or
- (ii) A manual block system shall be placed permanently in effect that shall conform to the following conditions:
- (A) A passenger train shall not be admitted to a block occupied by another train except when absolutely necessary and then only by operating at restricted speed:

- (B) No train shall be admitted to a block occupied by a passenger train except when absolutely necessary and then only by operating at restricted speed;
- (C) No train shall be admitted to a block occupied by an opposing train except when absolutely necessary and then only while one train is stopped and the other is operating at restricted speed: and
- (D) A freight train, including a work train, may be authorized to follow a freight train, including a work train, into a block and then only when the following train is operating at restricted speed.
- (2) On and after January 17, 2012, where a passenger train is permitted to operate at a speed of 60 or more miles per hour, or a freight train is permitted to operate at a speed of 50 or more miles per hour, a block signal system complying with the provisions of this part shall be installed, unless an FRA approved PTC system meeting the requirements of this part for the subject speed and other operating conditions is installed.
- (d)(1) Prior to December 31, 2015, where any train is permitted to operate at a speed of 80 or more miles per hour, an automatic cab signal, automatic train stop, or automatic train control system complying with the provisions of this part shall be installed, unless an FRA approved PTC system meeting the requirements of this part for the subject speed and other operating conditions, is installed.
- (2) On and after December 31, 2015, where any train is permitted to operate at a speed of 80 or more miles per hour, a PTC system complying with the provisions of subpart I shall be installed and operational, unless FRA approval to continue to operate with an automatic cab signal, automatic train stop, or automatic train control system complying with the provisions of this part has been justified to, and approved by, the Associate Administrator.
- (3) Subpart H of this part sets forth requirements for voluntary installation of PTC systems, and subpart I of this part sets forth requirements for mandated installation of PTC systems, each under conditions specified in their respective subpart.

- (e) Nothing in this section authorizes the discontinuance of a block signal system, interlocking, traffic control system, automatic cab signal, automatic train stop or automatic train control system, or PTC system, without approval by the FRA under part 235 of this title. However, a railroad may apply for approval of discontinuance or material modification of a signal or train control system in connection with a request for approval of a Positive Train Control Development Plan (PTCDP) or Positive Train Control Safety Plan (PTCSP) as provided in subpart I of this part.
- (f) Any person (an entity of any type covered under 1 U.S.C. 1, including but not limited to the following: a railroad; a manager, supervisor, official, or other employee or agent of a railroad; any owner, manufacturer, lessor, or lessee of railroad equipment, track, or facilities; any independent contractor providing goods or services to a railroad; and any employee of such owner, manufacturer, lessor, lessee, or independent contractor) who violates any requirement of this part or causes the violation of any such requirement is subject to a civil penalty of at least \$650 and not more than \$25,000 per violation, except that: Penalties may be assessed against individuals only for willful violations, and, where a grossly negligent violation or a pattern of repeated violations has created an imminent hazard of death or injury to persons, or has caused death or injury, a penalty not to exceed \$100,000 per violation may be assessed. Each day a violation continues shall constitute a separate offense. See appendix A to this part for a statement of agency civil penalty policy.
- (g) A person may also be subject to criminal penalties for knowingly and wilfully making a false entry in a record or report required to be made under this part, filing a false record or report, or violating any of the provisions of 49 U.S.C. 21311.
- (h) The requirements of subpart H of this part apply to safety-critical processor-based signal and train control systems, including subsystems and components thereof, developed under the terms and conditions of that subpart.

#### § 236.1

- (i) Preemptive effect. (1) Under 49 U.S.C. 20106, issuance of these regulations preempts any state law, regulation, or order covering the same subject matter, except an additional or more stringent law, regulation, or order that is necessary to eliminate or reduce an essentially local safety or security hazard; is not incompatible with a law, regulation, or order of the United States Government; and that does not impose an unreasonable burden on interstate commerce.
- (2) This part establishes federal standards of care for railroad signal and train control systems. This part does not preempt an action under state law seeking damages for personal injury, death, or property damage alleging that a party has failed to comply with the federal standard of care established by this part, including a plan or program required by this part. Provisions of a plan or program which exceed the requirements of this part are not included in the federal standard of care.
- (3) Under 49 U.S.C. 20701–20703, issuance of these regulations preempts the field of locomotive safety, extending to the design, the construction, and the material of every part of the locomotive and tender and all appurtenances thereof.

[49 FR 3382, Jan. 26, 1984, as amended at 53 FR 52936, Dec. 29, 1988; 63 FR 11624, Mar. 10, 1998; 69 FR 30595, May 28, 2004; 70 FR 11095, Mar. 7, 2005; 72 FR 51198, Sept. 6, 2007; 73 FR 79704, Dec. 30, 2008; 75 FR 2698, Jan. 15, 2010]

# Subpart A—Rules and Instructions: All Systems

GENERAL

### § 236.1 Plans, where kept.

As required for maintenance, plans shall be kept at all interlockings, automatic signals and controlled points. Plans shall be legible and correct.

[49 FR 3382, Jan. 26, 1984]

## § 236.2 Grounds.

Each circuit, the functioning of which affects the safety of train operations, shall be kept free of any ground or combination of grounds which will permit a flow of current equal to or in excess of 75 percent of the release value of any relay or other electromagnetic device in the circuit, except circuits which include any track rail and except the common return wires of single-wire, single-break, signal control circuits using a grounded common, and alternating current power distribution circuits which are grounded in the interest of safety.

# § 236.3 Locking of signal apparatus housings.

Signal apparatus housings shall be secured against unauthorized entry.

[49 FR 3382, Jan. 26, 1984]

# § 236.4 Interference with normal functioning of device.

The normal functioning of any device shall not be interfered with in testing or otherwise without first taking measures to provide for safety of train operation which depends on normal functioning of such device.

[49 FR 3382, Jan. 26, 1984]

# § 236.5 Design of control circuits on closed circuit principle.

All control circuits the functioning of which affects safety of train operation shall be designed on the closed circuit principle, except circuits for roadway equipment of intermittent automatic train stop system.

# § 236.6 Hand-operated switch equipped with switch circuit controller.

Hand-operated switch equipped with switch circuit controller connected to the point, or with facing-point lock and circuit controller, shall be so maintained that when point is open onefourth inch or more on facing-point switch and three-eights inch or more on trailing-point switch, track or control circuits will be opened or shunted or both, and if equipped with facingpoint lock with circuit controller, switch cannot be locked. On such handoperated switch, switch circuit controllers, facing-point locks, switch-andlock movements, and their connections shall be securely fastened in place, and contacts maintained with an opening of not less than one-sixteenth inch when open.